Government of Saskatchewan

Annual Report 1998 - 1999

Saskatchewan
Highways and
Transportation

100-04515/

Table of Contents

Letter of Transmittal ii

Deputy Minister's Letter iii

Organization Chart iv

Department Mission v

Department Goals, Accomplishments and Objectives 1

Overview of Expenses 6

Department Overview 8

Administration 11

Accommodation and Central Services 15

Logistics, Planning and Compliance 17

Preservation and Maintenance of Transportation System 21

Operation of the Transportation System 23

Construction of Transportation System 25

Letter of Transmittal

Minister of
Highways and
Transportation

SASKATCHEWAN

Legislative Building
Regina, Saskatchewan S4S 0B3
(306) 787-6447

His Honour The Honourable J.E.N. Wiebe
Lieutenant-Governor of Saskatchewan

Your Honour:

I am pleased to submit the 1998/99 Saskatchewan Highways and Transportation Annual Report.

Yours sincerely,

Maynard Sonntag

Maynard Sonntag

Deputy Minister's Letter

Saskatchewan Highways and Transportation

Saskatchewan

April 1, 1999

Honourable Maynard Sonntag
Minister of Highways and Transportation

Honourable Minister:

I am pleased to present the Annual Report for Saskatchewan Highways and Transportation for the fiscal year ending March 31, 1999. In this report, you will find an overview of our accomplishments in this fiscal year as well as future goals and objectives.

As steps to fulfill the commitment, to the twinning of Highway No. 1 across Saskatchewan and Highway No. 16 from Battleford to the Alberta border, grading was undertaken on 27.5 km on Highway No. 1 from west of Gull Lake to west of Tompkins. Paving will occur on that 27.5 km in the 1999-construction season.

A 21 km grading contract was tendered in fall 1998 for grading of Highway No. 1 from east of Indian Head to west of Wolseley. Grading design and right-of-way purchase occurred on Highway No. 16 on a section of highway between Marshall and Lashburn; grading will start in 1999.

In this fiscal year, a new bridge to support the social and economic development of Outlook and area was opened on Highway No. 15. Built over two years and at a cost of $11 million, this bridge provides needed improvement in levels of service and safety.

$23.8 million in secondary highway upgrading was delivered under the Canada Saskatchewan Agri-Infrastructure Program (CAIP) to alleviate problems caused by increased grain haul, value-added processing and other agricultural haul patterns.

The department continued to work to ensure Saskatchewan's interests were protected in any changes to the grain handling and transportation system. The Short Line Advisory Unit continued to assist farm and local government groups along 20 different rail subdivisions to assess alternatives to branch line abandonment. Assistance was provided in the establishment of Saskatchewan's second producer-owned short line, Red Coat Road and Rail Ltd. A second joint submission with the other western provinces was made to the Estey Grain Review.

Planning began to host the Sixth International Conference on Heavy Vehicle Weights and Dimensions in Saskatoon in June 2000. About 175 delegates from around the world will present about 80 to 100 technical papers.

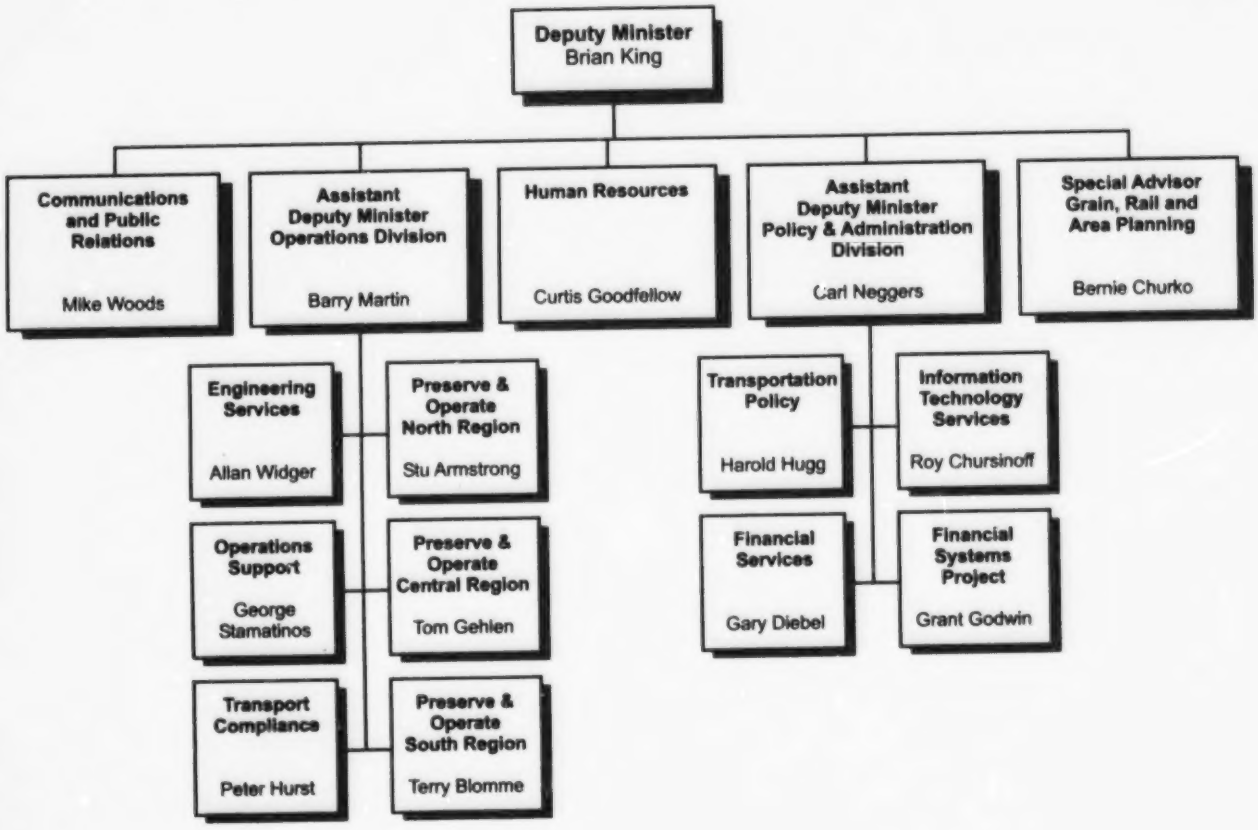
The department continued to provide learning opportunities for employees. Such opportunities were provided through training on computer software and the Internet, team building, Occupational Health and Safety, and anti-racial discrimination and anti-sexual harassment.

Our department was again a government leader in dedication and contribution from employees.

Brian King
Deputy Minister

Organization Chart

As of March 31, 1999



Department Mission

- Develop and deliver programs and services
- Provide leadership and expertise
- Build partnerships; and
- Foster a positive work environment

Department Goals, Accomplishments and Objectives

Goal A: Ensure infrastructure for all modes is operated at appropriate levels of safety, quality and accessibility.

Accomplishments

- At a cost of 28.7 million, the department upgraded 220 km and spot strengthened 66 km of rural thin membrane surface (TMS) highways that are being impacted by increasing grain and value-added processing haul.
- The department resurfaced 419 km of provincial highways at a cost of $30.2 million.
- In support of the provincial twinning initiative, 27.5 km of subgrade was constructed on Highway No. 1 from west of Gull Lake to west of Tompkins. Aggregate was stockpiled to facilitate surfacing this section of the TransCanada highway in 1999-00. In late summer, a 21 km grading contract was tendered for twinning Highway No. 1 from east of Indian Head to Wolseley. The grading should be completed in 1999-00. The grading design for Highway No. 16 between Marshall and Lashburn was completed.
- The twinned highway between Saskatoon and Martensville was opened after a 14 km paving contract was completed on Highway No. 12 and the overpass at the junction of Highway No. 12 and Highway No. 11 was widened.
- The bridge deck was constructed and the associated roadways paved on Highway No. 15 at the South Saskatchewan River crossing near Outlook. This project was completed over two years at a cost of $11 million.
- As part of the safety improvement program, an acceleration lane was constructed at the Husky Oil Access on Highway No. 16 near Lloydminster. A service road between the Saltcoats Regional Park and Saltcoats was also constructed to separate low speed park traffic from traffic on the Yellowhead Highway. In addition, turning lanes were constructed at three locations.
- The department graded 15 km of Highway No. 909 to Turnor Lake. Construction continued on the Athabasca Seasonal Road project as an additional 70 km of seasonal road and three bridges were constructed. These projects will improve accessibility for northern Saskatchewan residents.
- The department reconstructed 41 km of Highway No. 165 from 15 km North of Jct. Highway No. 2 to the Jct. Highway No. 910. 17 km of Highway No. 903 from Muskoseu Creek to Broad Creek was reconstructed. Work continued on Highway No. 965 between 10 km and 23 km east of Jct. Highway No. 903. Community access roads to Jans Bay and Canoe Narrows were rebuilt as part of this project. These projects improve accessibility for northern residents and support the timber industry.
- Under the federal government's Airport Capital Assistance Program (ACAP) loaders were purchased for the airports at Fond du Lac, Stony Rapids and Uranium City.
- The department partnered with the city of Estevan on a regional highway planning study. A similar study was initiated for Saskatoon area with the City of Saskatoon and the RM of Corman Park as partners. A smaller planning study was started in and around Rosetown area.
- The Transport Compliance Branch, in partnership with other Canandian jurisdictions and industry, delivered "Operation Airbrake," a multifaceted awareness campaign designed to reduce the high incidence of serious brake defects in heavy vehicles. In partnership with various traffic safety interest groups and industry, the Branch also delivered the "NO ZONE" program, a compaign showing drivers of small vehicles how to safely share the road with large trucks.
- "Roadcheck '98," an annual 72-hour road safety inspection of commercial vehicles, was conducted by Transport Compliance Branch in June 1998. More than 300 trucks were inspected resulting in 18 % being placed "Out of Service" for various mechanical defects. The national "Out of Service" rate was 22 % for the same period.

Future Objectives

- To maintain an acceptable level of service the department plans to resurface 320 km and spot improve 180 km of provincial highways.
- The Athabasca Seasonal Road will be completed and opened to support transportation services to the Athabasca basin area.
- To improve safety and level of service to the motoring public, construction of an interchange at Pasqua Street and Highway No. 11 will commence in 1999/00. This project will be completed in the fall of 2000/01.
- The department will start a grading contract to twin Highway No. 16 from Saskatoon to 7.7 km east.
- As part of twinning initiative, we will complete paving of 27.5 km of Highway No. 1 from west of Gull Lake to west of Tompkins. In addition, the department will commence a 10.3 kim twinning project on Highway No. 16 from west of Lashburn to east of Marshall.
- Through the Safety Improvement Program (SIP) the department will partner with industry and stakeholders on the construction of additional traffic lanes at five high volume intersections. Delineation lighting will be installed at 11 loactions across the province. In partnership with SERM, a bicycle and pedestrian walkway will be constructed at Good Spirit Lake to separate this traffic from vehicles.
- The department, through partnerships with key stakeholders, will continue to promote education and awareness programs to improve highway safety and increase self-compliance by carriers and drivers.
- Complete the long-term transportation planning studies for Saskatoon, Estevan, and Regina South East bypass.

Goal B: Minimize the long-term costs of preserving the highway system.

Accomplishments

- Increased the presence of the Highway Transport Patrol by hiring five new Highway Transport Officers. This will improve vigilance on the secondary highway system where commercial vehicle overloading is the most serious.
- Negotiated transportation partnership agreements with shippers/carriers. The $3.2 million generated in revenues will be used for future highway maintenance costs.

Future Objectives

- As part of the department's strategic planning we will determine a long-term sustainability level for the provincial highway system.
- Complete the development of a system to provide needs-based budgets for all preservation activities.
- Continue to work with Canadian Institute of Chartered Accountants (CICA) and Transportation Association of Canada (TAC) to determine an appropriate valuation method for highway assets.
- The department plans to continue its efforts to develop more "road friendly" trucks in an effort to reduce road costs. As part of this initiative, the department plans to conduct a spring experiment to determine the advantages of operating trucks equipped with a Central Tire Inflation (CTI) device that enables the tire pressure to be reduced when the vehicle is being operated on load sensitive roads.

Goal C: Continually improve effectiveness, efficiency and economy of transportation programs.

Accomplishments

- The Financial System (HIFI 2000) was put into service to over 200 users. Other enhancements including customized reporting functions are designed to improve decision-making processes and allow for improved access to financial information and financial functions by the users.
- Reduced pre-audit effort on invoices of less than $250.00 resulted in a reduction in overall processing costs.
- The department drafted a new surfacing manual for department staff that will provide better guidance in surfacing and structural pavement designs.
- The new Roadside Management Manual, Volumes I and II, was published. This will assist staff to efficiently manage roadside development and signing.
- Began construction and implementation of a "world class" Maintenance Management System that will allow managers and crew supervisors to do better crew scheduling and allocation. A partnership with two other government agencies and a private sector company was initiated and software design was started. The software was implemented in the other two jurisdictions. Due to resource limitations implementation in Saskatchewan was limited to a pilot project in one are. Full implementation is planned for 1999-2000.

Future Objectives

- Establish a pilot project to reduce low-dollar invoices through the use of procurement cards.
- Review and implement business process improvements to complement the new Financial System.
- To minimize the long-term costs of preserving the highway system
- Develop strategic objectives for the preservation program to support the department's Vision and Values. Install state of the art MMS in all the section shops to create improved communications and decision-making.
- Ensure Year 2000 (Y2K) readiness for all critical department equipment, facilities and systems.
- Continue to develop a long-term plan for acquiring and managing non-renewable sand and gravel resources required for highway construction and preservation.

Goal D: Ensure that the transportation system is compatible with a sustainable environment.

Accomplishments

- The department continued negotiations respecting the transition of "Energy Efficient Motor Vehicle" (EEMV) agreement holders to the partnership program.

Future Objectives

- Contribute to the development of the provincial Climate Change Strategy led by Saskatchewan Energy and Mines.
- To improve worker safety and reduce environmental contaminants, the department will eliminate the use of highly toxic chemicals used for determining asphalt content.

Goal E: Continuously improve stakeholder relations

Accomplishments

- The department has undertaken several initiatives to improve stakeholder relations. Safety partnerships were pursued including working with Saskatchewan Safety Council, Saskatchewan Trucking Association (STA), Canadian Automobile Association (CAA), SGI, RCMP and others in promotion of *The No Zone*.
- Key tags promoting the Highway Hotline were created in partnership with the CAA.
- With an eye to improving safety, advertising about construction or maintenance projects was increased to improve the public level of awareness about activity on highways.
- The department has worked through the Transportation Partnership Program (TPP) to balance the industry's desires for more effective and efficient transportation, and the department's needs for maintaining Saskatchewan's highways. The objectives of this initiative are to work in partnership with industry to improve highway safety, to reduce transportation costs and to improve highways. The department works with industry to design and implement truck transportation systems that meet all three objectives.
- The Joint Union Management Committee (UMC) continued to meet throughout the year.
- Participated on the Advisory Committee to the Regina and Saskatoon Airport Authorities to provide technical assistance in the airport transition negotiations with the federal government.
- Continue to support the development and operation of Area Transportation Planning Committees throughout the province.

Future Objectives

- Continue supporting ATPC's, will continue participation in UMC, and continue to strive to improve information on department initiatives to the public.
- Launch a new department web site to improve access to vital departmental information.
- Complete a draft policy for public consultation on major operational policies.

Goal F: Support Economic Development

Accomplishments

- Worked with industry, port and government stakeholders to establish the Northwest Corridor Development Corporation which promotes increased usage and maintains the long term viability of the Port of Prince Rupert and the north-west transportation corridor.
- Assisted in the establishment of Red Coat Road and Rail Limited, Saskatchewan's second producer-owned short line railway. Also assisted rail and farmer groups along 20 different rail subdivision to assess alternatives to branch line abandonment.
- Worked with industry to support economic development by reducing logistical costs of doing business by $1 million to $2 million.
- Submitted a Road Impacts Report to the Estey Grain Review.

Future Objectives

- Develop a strategic plan that identifies the infrastructure investment needs to support the provincial economy.
- Construct a surfacing structure on 13.1 km of Highway No 6 from north of Minton to south of Ceylon to improve this highway to the U.S.

Overview of Expenses

Subvote Subprogram	*1998-99 Actual $$-000's*	*1998-99 Actual FTEs*	*1998-99 Budget $$-000's*	*1998-99 Budget FTEs*	*Variance (Budget to Actual) $$-000's*	*FTEs*
Administration	**5,041**	**83.0**	**4,832**	**86.8**	**209**	**(3.8)**
Explanation of significant differences between budget and actual.						
1: Information Technology market supplements.						
2: Positions transferred and seconded in.						
3: "Orange Zone" advertising {Safety related}.						
Accommodation & Central Services	**6,474**	**0.0**	**6,854**	**0.0**	**(380)**	**0.0**
Explanation of significant differences between budget and actual.						
1: Rental space turned back to S.P.M.C..						
2: Savings in postal and general contracting.						
3: Deferred furniture acquisition.						
Construction						
Highways & Bridges	45,004	53.4	38,491	55.6	6,513	(2.2)
Airports	1,120	0.0	275	0.3	845	(0.3)
Rural Highway Restoration	22,740	11.2	22,806	16.0	(66)	(4.8)
Engineering Services	6,554	113.1	6,586	116.7	(32)	(3.6)
Sub -Total	**75,418**	**177.7**	**68,158**	**188.6**	**7,260**	**(10.9)**
Explanation of significant differences between budget and actual.						
1: Accelerated activities on twinning Highway No. 1 i.e. Gull Lake and Indian Head.						
2: Completion of Athabasca seasonal road.						
3: Accelerated activities on the Besnard Lake road.						
4: Increased winter crushing requirements.						
5: Airport Capital Assistance Program projects. (Cost shared with the federal government).						
Preservation & Operation						
Operation of Transportation System	31,450	192.3	29,121	209.0	2,329	(16.7)
Surface Preservation	84,577	329.6	82,468	314.0	2,109	15.6
Winter Maintenance	13,794	164.7	14,058	167.4	(264)	(2.7)
Regional Services	5,128	79.4	5,053	85.9	75	(6.5)
Revolving Fund	2,661	235.3	0	174.5	2,661	60.8
Sub -Total	**137,610**	**1,001.3**	**130,700**	**950.8**	**6,910**	**50.5**
Explanation of significant differences between budget and actual.						
1: Land purchases for road construction; gravel pit acquisition; pavement marking and other road safety pressures.						
2: Resurfacing projects e.g. Hwy No. 1 (Wolseley East), Hwy No. 11 (Saskatoon to Dundurn) & Hwy No. 16 (Lanigan).						
3: Miscellaneous strategic strengthening projects.						
4: Favourable winter weather condition.						
Logistics, Planning & Compliance	**7,804**	**107.8**	**8,267**	**118.6**	**(463)**	**(10.8)**
Explanation of significant differences between budget and actual.						
1: Area Planning Committees not fully functional. (Initiative was in initial stages).						
2: Vacancy savings.						
3: Reduced consulting services.						
Total Department	***232,347**	**1,369.8**	****218,811**	**1,344.8**	**13,536**	**25.0**

***Includes 2,661 Revolving Fund Statutory**

****Does not include $10,920 Special Warrant**

Department Overview

Saskatchewan Highways and Transportation is responsible for the following Acts:

The Highways and Transportation Act, 1997

The Dangerous Goods Transportation Act

The Engineering and Geoscience Profession Act

The Sand and Gravel Act

The Railway Act

The Highway Traffic Act (only certain sections)

Resources

Financial

The total approved department budget for 1998/99 was $229,731,000. This amount included an original estimate of $218,811,000 plus a special warrant of $10,920,000. The special warrant was provided primarily for additional highway maintenance and capital projects undertaken due to favourable spring, summer and fall weather and for the purchase of upgraded airport safety equipment.

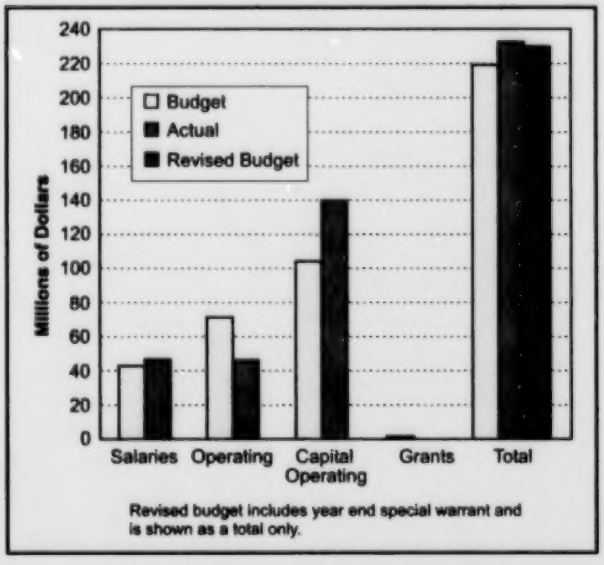


Figure 1. 1998/99 budget to actual expenditures comparison.

The department's 1998/99-revenue budget was $13,023,580. The largest portion of this amount was for federal government cost-sharing revenues under the Canada Agriculture Infrastructure Programs - $8,800,000, Athabasca Road – $2,400,000. The balance is comprised of various permit fees, material and commodity sales, rental revenues, revolving fund surcharges and revenues under bulk-haul agreements.

Actual revenues generated in 1998/99 were $11,804,102. Cost-shared revenues were $1.5 million lower than expected and other revenues were $352,510 higher due to increased rental, property and material sales. (Figure 2).

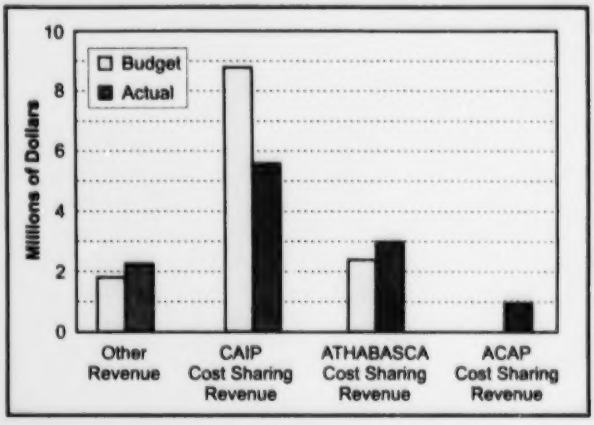


Figure 2. 1998/99 budget to actual revenues comparison.

The distribution of the department's actual expenditures among the various program areas is shown in Figure 3. The majority of expenditures (91 %) are consumed in activities relating to construction, maintenance and operation of the transportation network.

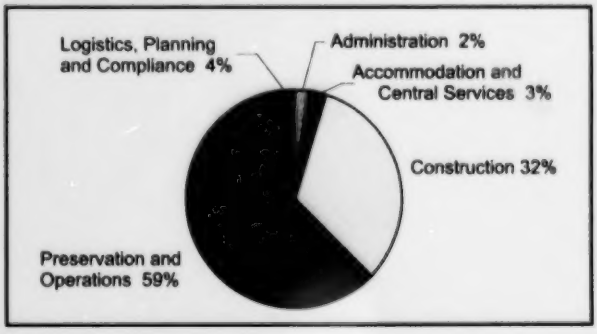


Figure 3. 1998/99 actual expenditures distribution.

People

In 1998/99 the department budgeted to employ 1,344.8 full time equivalent positions (FTE's). The distribution of these positions is shown in Figure 4.

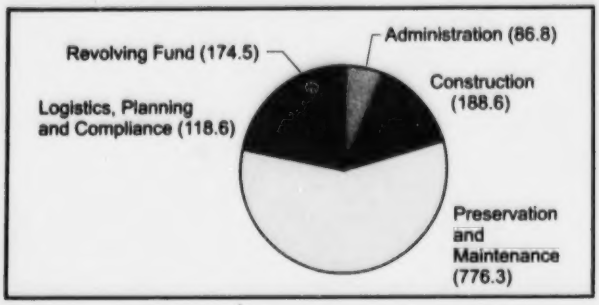


Figure 4. 1998/99 budgeted FTE's by program (Subvote).

More than half of the department's personnel (950.8 FTE's/71 %) support activities of the maintenance program. This includes maintenance activities such as the resurfacing of paved highways and rehabilitation and preventative maintenance of roads, bridges, and airports. Employees in work crews throughout the province carry out these activities. Also included in this total are 174.5 FTE's which are devoted to maintaining and repairing the department's equipment fleet through the Highways Revolving Fund.

The department's construction activities are primarily contracted to private road builders. It provides for the planning, engineering standard, design and construction management for upgrading or new construction of provincial highways, bridges and airports (188.6 FTE's/14 %).

The remainder of the department's employees are in the Administration subvote, and in Logistics, Planning and Compliance. These programs account for the remaining 205.4 FTE's/15 %. Detailed breakdowns can be found in the subvote sections of the report.

Figure 5 shows that about 82 % of the department's employees belong to the Saskatchewan Government Employees Union (SGEU) (in-scope positions). The remaining 18 % belong to management, engineering or other professional groups (out-of-scope).

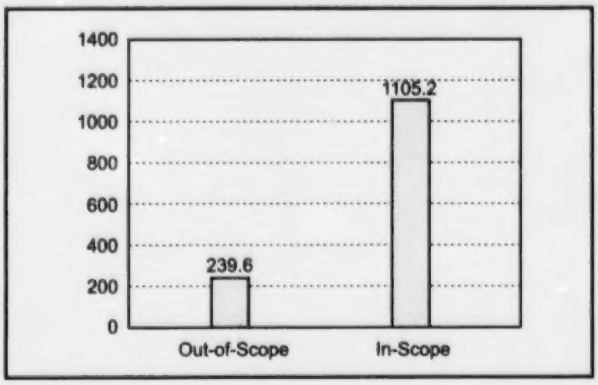


Figure 5. 1998/99 budgeted FTE's, In-scope vs. Out-of-Scope.

Figure 6 shows 56 % of the department's employees are permanent employees, while 44% hold non-permanent positions. Most of these non-permanent positions are seasonal labour service positions employed in the maintenance organization.

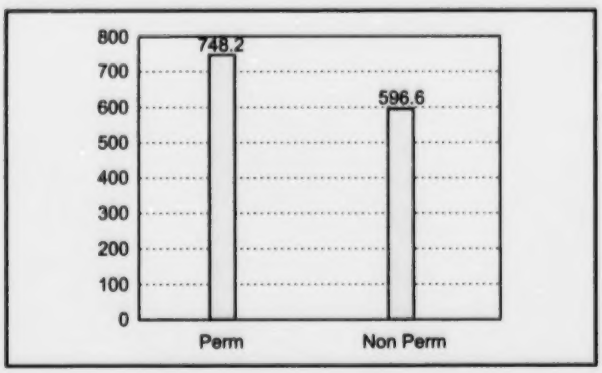


Figure 6. 1998/99 budgeted FTE's, Permanent vs. Non-permanent positions.

Assets

The department's primary responsibility is the management and preservation of the province's transportation system assets including a 26 000 km network comprised of:

- 12 000 km of structural paved highways;
- 5 400 km of gravel roads; and
- 8 600 km of non-structural roads.

The department is responsible for 850 bridges on this network.

The existing and historical changes in the provincial highway network length and surface type are shown in Figure 7.

The department operates 19 airports in northern Saskatchewan, 12 cable ferries on the Saskatchewan River, and one lake ferry on Wollaston Lake.

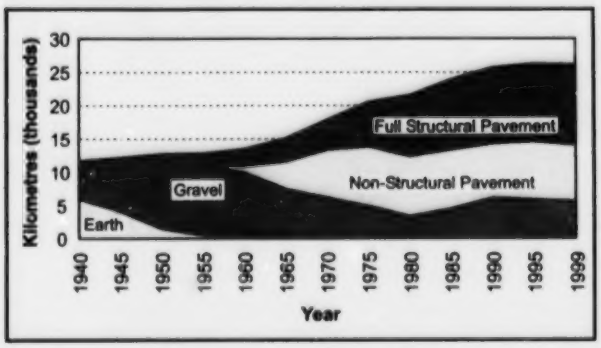


Figure 7. Length and surface type changes in the provincial highway network.

The municipal road network is under the control and jurisdiction of individual rural municipalities. Under the Rural Municipal Sharing Program (RMSP), the province and rural municipalities have designated 53 303 km eligible for provincial revenue sharing assistance. The RMSP assistance is funded through the Department of Municipal Government. Municipal Engineering Section of Engineering Services Division provides the provincial planning and program delivery support for the RMSP. The lengths of rural municipal road types are shown in Figure 8. A gravel road surface is provided on approximately 97 % of the designated road network. The remaining 3 % have an asphalt surface.

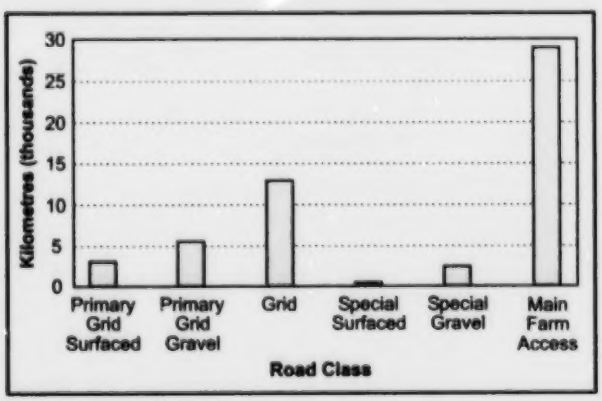


Figure 8. Rural municipal road system - designated roads.

Total travel on the provincial highway network in 1998/99 was 7.3 billion km. Saskatchewan's designated National Highway System rural roadways comprise 10 % of the total highway network and carry 36 % of the annual traffic.

The department adopted new asset management methodology that provides improved methods for managing our transportation assets by measuring and reporting on value and rate of deterioration from year-to-year. This allows the department to set preservation objectives and to measure results annually. Current estimates place the value of the provincial road network at $6 billion.

The department owns, operates and maintains its own maintenance equipment fleet. This equipment is managed through the Highways Revolving Fund. This fund allows capital acquisition of equipment to be charged to the department's maintenance budget over several years based on actual use, rather than charging the actual capital cost to the department in the year of acquisition. The book value of the department's equipment fleet assets is about $41 million.

The department also owns a number of miscellaneous office and computer equipment assets.

Administration

Program Delivery

This program provides direction, consultative, and advisory services to the department. It is responsible for providing human resource services including labour relations, employee services, classification, staffing, industrial relations, and staff development. The program provides financial assistance and support, including the preparation of financial reports and statements, coordinating budgets and forecasts, and processing accounts payable, accounts receivable and payroll. It provides the department with information technology planning, acquisition and ongoing support and is responsible for communicating to internal and external audiences through strategic communication planning, public and media relations, advertising and correspondence. It provides Geographic Information Services (GIS) and Crown land acquisition and management to the department and local governments.

This is accomplished through activities in:

- Minister's office administration
- Executive administration
- Communications Branch
- Finance and Administration Branch
- Human Resource Branch
- Information Services Branch
- Property Services Branch

1998/99 Objectives

Continue with the major initiative of implementing the department financial and management reporting systems including the ORACLE financial system (HIFI 2000), new maintenance management system (MMS), CVSA system, IRD Trucking Partnerships project (GPS/GIS).

Made HIFI 2000 available to over 200 users. Development of the GIS and GPS software for the IRD Trucking project has not been completed.

Continue undertaking project initiatives to improve effectiveness, efficiency and economy by reviewing and streamlining existing IT processes using the Information Technology Infrastructure Library (ITIL) processes.

Started ITIL help desk processes for end user support, centralized call tracking and started standardization of all desktops.

Continue improving IT staff development, retention and compensation, by working with PSC and other departments.

Worked successfully with Public Service Commission (PSC) to obtain IT salary supplements for employees in the IT series.

Put in use central server/thin client computing architecture (Winframe) to distribute all ORACLE based applications across the organization.

Started Winframe to distribute HIFI 2000, IPS (Personnel System) and all other department Oracle applications to all areas of the province.

Continue addressing Y2K issues including assessment, testing and compliance for critical IT services.

Developed plans for Y2K mitigation completed majority of testing and developed a contingency plan.

Promote use of INFOCentral.

Employees were able to access network application forms, S-4's, phone lists, Help desk web page and other general highway information by using INFOCentral.

Complete control section plans and Control Section Designation map.

Completed control section plans and distributed across the province using INFOcentral.

Produce highway map for Tourism Saskatchewan and market the digital map with proceeds returned to GIS.

Produced highway map working with Tourism Saskatchewan.

Work with the Department of Finance in a pilot project to reduce the pre-audit on low risk invoices.

Approval was received June 1999 from the Department of Finance for a permanent reduction of the pre-audit on low risk invoices.

Start the government's new purchase card within Fleet Services shops across the province.

Deferred to next fiscal year.

Continue examining additional financial processes for streamlining and efficiency improvements within the department.

This will receive greater attention upon the complete implementation of the new Financial System (HIFI 2000). Processes such as the piloting of the procurement card are designed to increase purchasing efficiency. Other enhancements such as customized reporting functions are designed to improve decision-making processes.

Continue implementation of the new financial system within the department.

April 1, 1998 the Financial System (HIFI 2000) was started and will be fully implemented in 1999/00 across the entire organization.

Work toward full implementation and rollout of the PSIS system as resources allow.

The Property Services Information System (PSIS) is now available to the Southern Region. It will be distributed to the Central and Northern Regions when the most appropriate distribution mechanism is determined and as resources allow.

We intend to provide a new land use fee schedule by the end of December to be approved prior to March 31.

Deferred to next fiscal year.

Review and expand internal communication process including print and intranet methods.

Information Highway was introduced as a staff newsletter and is published monthly. It is distributed by printed copies to all staff and is available on the department intranet.

Increase profile of construction and major preservation projects to Saskatchewan public.

Increased amount of individual print advertisements for major capital projects and added informational signs at capital and maintenance projects.

Promote department initiatives related to Investment in Transportation Strategy.

The Investment in Transportation strategy is posted on the intranet. A short line development brochure was created and distributed that is based on strategy goals.

Provide continuous learning opportunities for department employees.

Learning opportunities were provided for:

- Training on computer software and the Internet
- Team building
- Occupational Health and Safety
- Anti-racial discrimination and anti-sexual harassment

Improve employment equity designated group representation in the department.

Goals and results for improving employment equity designated group representation in the department in the 1998/99 fiscal year are represented in Table 1.

The department exceeded goals in three designated groups – women in non-traditional positions, persons with disabilities, and visible minorities. Most appointments in all designated groups were in the non-permanent category except women in management.

Department employees continued their involvement in the Aboriginal Government Employees Network (AGEN) and the Saskatchewan Employment Equity Practitioners Association. Staff was active in the formation of the Visible Minority Support Group.

Coordinate core competencies for staffing.

Coordinated Staffing Standards (in-scope) with the PSC.

Develop a strategic succession plan.

Issue deferred for broader departmental strategic discussion.

Develop a strategic human resource plan.

Issue deferred for broader departmental strategic discussion.

Develop human resource performance measures.

Issue deferred for broader departmental strategic discussion.

Start the Intranet Personnel System (IPS) to the regional offices.

The Intranet Personnel System (IPS) was set to use by the PSC for tracking attendance in the department. At this time it is not fully operational.

Hire an Occupational Health and Safety position to assist OHS committees and injured workers.

A permanent Occupational Health and Safety consultant was hired.

Develop a Human Resource Information System to provide an electronic database for each administrative unit in the department.

Development of a Human Resource Information system was dropped.

Table 1: Employment equity short term goals and appointments.

Designated Groups	Goals	Permanent Appointments	Non-Permanent Appointments	Total Permanent & Non-Permanent
Women in Management	7	6	0	6
Women in Non-traditional Positions	53	5	56	61
Persons of Aboriginal Ancestry	34	2	26	28
Persons with Disabilities	3	1	6	7
Members of Visible Minority Groups	4	1	6	7
Total	**101**	**15**	**94**	**109**

Resources

Financial

The four administration division branches, executive administration and the Minister's office expenses accounted for two % of total department expenditures in 1998/99 (Figure 9).

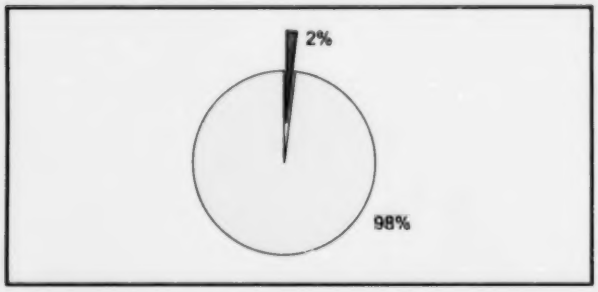


Figure 9. Actual 1998/99 expenditures as a per cent of total department expenditures.

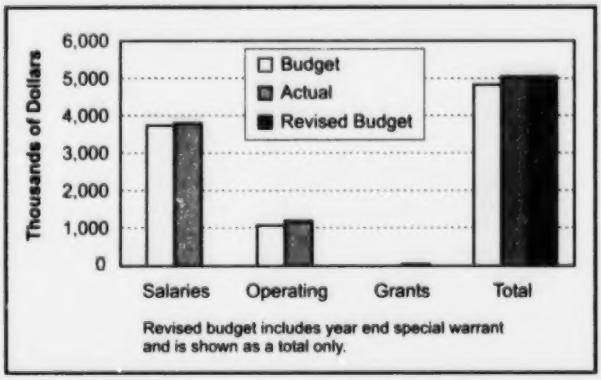


Figure 10. Actual 1998/99 expenditures - Administration.

People

The administration division's 86.8 FTE positions represented six % of the department's total FTE positions (Figure 11). The actual number of FTEs used was less than budgeted due to staffing vacancies.

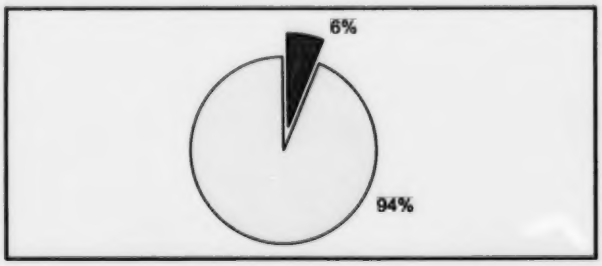


Figure 11. FTE's as a per cent of total department FTE's.

Assets

The department has a substantial investment in computer equipment including a Local Area Network (LAN) in Regina head office and Wide Area Networks (WAN) in the three region offices. These networks support a variety of department technical and financial applications.

The department protects the privacy of information stored in its computer systems through the use of encryption and by use of a well-managed, industry-standard password protection program. It also protects this information from loss by destruction by: producing daily back-up stored off site; having a disaster-recovery process for its computer systems; and by having virus protection software running continually on its networks and computers.

The department owns office equipment items and ergonomic furniture located throughout the Province.

1999/00 Objectives

- Put in use the government's new purchase card within Fleet Services shops across the province.
- Provide financial and administrative support and expertise to the department on all government and departmental financial and administrative policies, procedures and systems.
- Work with the department of Finance and Provincial Auditor's office to ensure all reporting requirements are met for public accounts.
- Ensure the department's financial reports are completed along with monthly accounting routines accurately and on a timely basis.
- Process all invoices and S-4's accurately within government policy and within the department of Finance's timelines.
- Complete implementation of the department financial and management reporting systems including the ORACLE financial system (HIFI 2000), new maintenance management system (MMS), CVSA system, IRD Trucking Monitoring System (GPS/GIS).
- Continue undertaking project initiatives to improve effectiveness, efficiency and economy by reviewing and streamlining existing IT processes using the Information Technology Infrastructure Library (ITIL) processes, installation of remote control software standardization of desktops
- Complete Y2K issues including assessment, testing and compliance for critical IT services.
- Promote use of INFOCentral and the department Internet site.
- Improve Correspondence Unit procedures.
- Develop a strategic communications plan and staff an internet communications consultant position.
- Launch a new department web site designed to increase customer interaction.

Accommodation and Central Services

Program Delivery

This program provides accommodations for office space, equipment and materials storage, weigh scale facilities and materials testing laboratories required for the department activities. The program provides for mail services; records management and storage; as well as minor renovations and major capital projects to support departmental program and safety issues and other changing operational requirements are included in this program.

1998/99 Objectives

Complete changes of space requirements based on function as opposed to position level.

This will be done over a three year period as modular furniture is purchased.

Procure and move the Prince Albert area office to more suitable office space.

The office relocated to the federal building 1288 Central Avenue.

Complete soil lab addition to ERD in Saskatoon.

The soil lab addition was completed by July 31, 1998. The new lab allowed consolidation of former small labs in North Battleford, Prince Albert and Yorkton.

Completed Equipment Storage Building (ESB) in Creighton, Churchbridge and Moosomin.

Seasonal deficiencies for site completion in Creighton was deferred, Churchbridge and Moosomin were completed during 1998. Work included concrete aprons and Moosomin addition plus yard work.

Begin upgrades to the ventilation system in the Swift Current equipment repair depot (ERD) and complete project in 1999/2000.

Upgrades to the ventilation system were completed in 1998/99.

Complete expansion and upgrades to the Engineering Services Division office space in Regina.

Expansion and upgrading to the Engineering Services Division was completed in 1998.

Complete sub-divisions of Strasbourg and Hodgeville, and Avonlea properties to facilitate the sale of a portion of these properties by SPMC.

Sub-division of Strasbourg and Hodgeville were completed, Avonlea was cancelled.

Prepare a five year accommodation plan.

Deferred to next year as time did not allow project to be done. The project scope was changed to a three year plan to be done in 1999/00.

Resources

Financial

This function accounted for three % of total department expenditures. The accommodation budget for 1998/99 was $6,854,000. Actual expenditures were $6,473,843. The capital project portion of the budget was $823,000, with actual expenditures of $793,491. Capital under-expenditures resulted from the carry over of seasonal deficiencies such as ground leveling, fill and compaction; concrete bollards and approaches to 1999/2000.

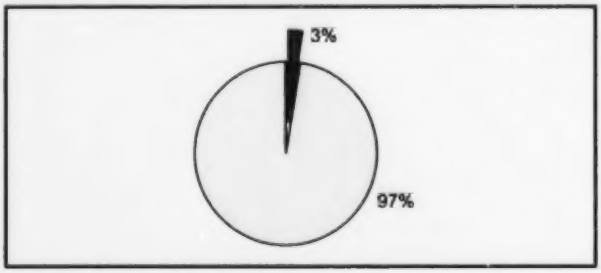


Figure 12. Actual 1998/99 expenditures as a per cent of total department expenditures.

People

There are no staff directly employed relating to the expenditures in this function. Finance and Administration Branch provide management and coordination of these services.

Assets

The department uses an extensive network of facilities throughout the province. All facilities are owned or leased by Saskatchewan Property Management Corporation. Saskatchewan Property Management Corporation responsible for the provision of program space to government departments.

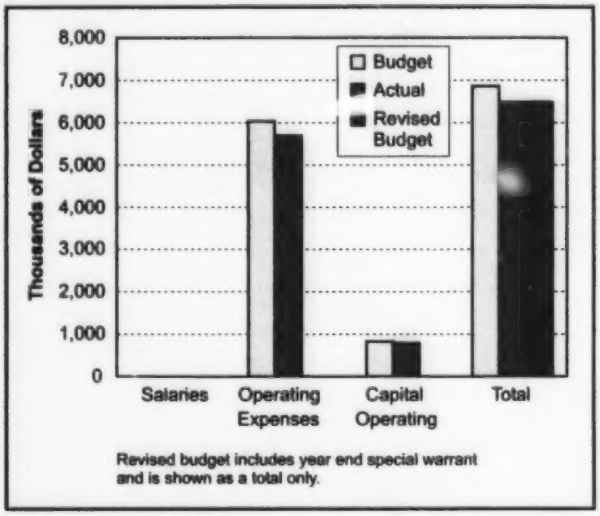


Figure 13. Actual 1998/99 expenditures - Accommodation and Central Services.

1999/00 Objectives

- Begin systems furniture purchase for Saskatoon offices. This is a three-year project as only minimal tenant improvements were done when Central Region and Engineering Services move.
- Clean up contamination at Saskatoon equipment storage building where underground fuel and used oil tanks were located.
- Obtain new equipment storage building for Saskatoon.
- Obtain additional space for Northern Region office. The additional space could not be taken until federal government moved.
- Prepare three-year accommodation plan.
- Complete functional requirements for Engineering Services, Southern Region and Head Office to allow proposal call for space prior to lease expiry.
- Complete minor renovations to head office by obtaining and renovating space on main floor to allow relocation of Transport Compliance.
- Determine surplus space in Rosetown equipment repair depot so SPMC can sub-let to Sask Power.

Logistics, Planning and Compliance

Program Delivery

This program provides for improvements to the efficiency and safety of Saskatchewan's transportation system by pursuing lower transportation, handling and storage costs to assist Saskatchewan industries in delivering their products to competitive world markets. It is also responsible for facilitating and developing new methods for the movement of goods by truck and ensuring compliance with transportation laws. The program also provides support for policy and program development as well as planning support for the providers and users of the transportation system.

1998-99 Objectives

Continue to work with local authorities, communities and other interest groups affected by the 1994 National Airports Policy, which transfers ownership of airports to local groups.

Entered into a seven-year partnership agreement with La Ronge Airport Authority to assist the town in the transition to full management, administration and operation of its airport.

Participated on the Advisory Committee to the Regina and Saskatoon Airport Authority to provide technical assistance in the airport transfer negotiations with the federal government.

Continue to monitor policy developments affecting the efficiency and competitiveness of the port system, which is a key export link in the export logistics system affecting Saskatchewan.

Jointly appointed the prairie provinces' representative to the Board of Directors of the Vancouver Port Authority, in conjunction with Alberta and Manitoba.

Participated in the Western Canadian Corridors and Ports Initiative, to improve the competitiveness and performance of West Coast ports and surface transportation systems for Saskatchewan shippers and producers.

Worked with industry, port, and government stakeholders to establish the Northwest Corridor Development Corporation, to promote increased usage and maintain the long-term viability of the Port of Prince Rupert and the northwest transportation corridor.

Jointly participated with the other prairie provinces in the federal Ministerial Pilotage Review, to improve performance and reduce costs of the pilotage system for Saskatchewan shippers and producers.

Continue to work with other governments, as well as shippers and producers, to ensure that there is meaningful competition in the rail transportation sector.

Continued to provide technical assistance to the Farmer Rail Car Coalition to support the case for farmer ownership of the Federal Grain Hopper Car Fleet.

Worked with western provinces to evaluate the impacts of the Canadian Transportation Act (CTA) on shippers, in preparation of the comprehensive review of the CTA in 2000.

Continued to provide technical assistance to provincial railways and administer *Saskatchewan's Railway Act*.

Continue to work with other jurisdictions to develop and implement the Western Transportation Initiative agreed to by the Western Premiers to promote the region's economic development through a safe, efficient and cost-effective transportation system.

The Western Transportation Initiative was subsumed by major western provincial initiatives relating to Grain Transportation and Transportation Port Planning.

Put into action a comprehensive Strategic Plan for the Grain Rail Initiative to achieve a modern grain logistics system that optimizes benefits for Saskatchewan producers.

The Short Line Advisory Unit continues to assist farm and local government groups located along 20 different rail subdivisions in assessing alternatives to branch line abandonment, including the development of short line railways.

Assisted in the establishment of Saskatchewan's second producer owned short line, RedCoat Road and Rail Ltd.

Saskatchewan and the other western provinces provided a second joint submission to the Estey Grain Review. Western ministers met with Mr. Justice Estey during the Review to discuss options for fostering a competitive, customer-oriented system that benefits producers.

Commissioned a joint grain logistics blueprint study with the other western provinces to identify opportunities to reduce handling and transportation costs and improve service for producers.

Apply the National Roadside Survey sponsored by the CCMTA to obtain comprehensive national and provincial statistics on commodity origin and destination, volume, and equipment usage to facilitate transportation planning.

The Intergovernmental Affairs Unit will carry out the survey, as part of a multi-jurisdictional effort, in the months of June and July 1999.

Continue to promote policies that encourage transportation providers and their suppliers to improve practices that contribute to a healthy environment.

The department is participating on the Interdepartmental Committee on Climate Change to provide input into the national process for Kyoto Protocol as well as the provincial process for a climate change strategy. The Transportation Policy Branch made a presentation on the Transportation Table Foundation Paper to the Saskatchewan Advisory Committee on Climate Change in February 1999. The department is monitoring the progress of the Transportation Table Options Paper and will facilitate the Tables public consultations in 1999.

Continue "The Truck Weight and Safety Plan" introduced in 1997/98 to:

1. Increase the level of compliance by carriers and drivers through partnerships that focus on incentives for excellent carriers and target enforcement efforts at poor performers.
   - In partnership with other Canadian jurisdictions and industry, the branch delivered, "OPERATION AIRBRAKE", an awareness campaign designed to reduce the high incidence of serious brake defects in heavy vehicles.
   - In partnership with traffic safety interest groups and industry, Transport Compliance branch delivered the "NO ZONE" program, a campaign alerting drivers of small vehicles to safely share the road with large trucks.
   - Legislation for "shipper liability " won't be proclaimed until all issues raised by the stakeholders have been carefully examined and considered. Recommended changes, which are intended to more appropriately apply the legislation without reducing effectiveness, are being proposed by a project steering committee.
2. Reduce road damage and the need to upgrade highways (emphasis will be put on the Collector Road System) because of high volumes of overweight trucks.
   - Increased presence of Highway Transport Patrol on the secondary highway system where overloading is the most serious, by hiring five new Highway Traffic Officers.
   - We continued our partnership with Alberta Inspection Services in operating joint enforcement activities along the Alberta/Saskatchewan border and the joint vehicle inspection station at Macklin.
3. Reduce the driver and vehicle out of service rate to the national average through focused inspections that will detect and remove mechanically unfit vehicles and fatigued drivers from our roads.
   - Conducted Roadcheck '98, an annual 72-hour road safety inspection of commercial vehicles. More than 300 trucks were inspected resulting in 18 % being placed "Out of Service" for various mechanical defects. By comparison, the national "Out of Service" rate was 22 %, for the same period.

Continue to support the six existing Area Transportation Planning Committees and aid the development/formation of other area transportation committees throughout the province.

Provided a formation and operational funding program for the Area Transportation Planning Committees.

Facilitated the formation of one additional ATPC, the Athabasca Basin Transportation Planning Committee.

Initial discussions with interested municipalities to form two additional transportation planning committees in the southern part of the province (the East Central and Central Transportation Planning Committee).

Provide technical support to the seven ATPC.

Pursue partnership agreements with shippers and carriers, with the potential to provide annual revenues of $4.5 million.

Partnership agreements with approximately 20 companies have been developed. Actual revenue $3.2 million.

Deliver a GIS/GPS truck monitoring system to administrate the partnership program.

Framework and overall concept of the program has been completed. Pilot project was started in early 1999. Completion is expected by the end of the 1999-2000 fiscal year.

Expand the partnership program to include long combination vehicles on selected two lane highways.

Deferred until 2000/2001.

Finalize the transition of "Energy Efficient Motor Vehicle" (EEMV) agreement holders to the partnership program.

Negotiations are continuing and are expected to be complete in early 1999.

Continue negotiations to transition major forest industry transportation agreements to the partnership program.

The discussions are in process but will not be concluded until 2000/2001.

Develop the business plan for the Transportation Partnership Fund.

Initial draft has been completed, but further work is required to finalize the draft to coincide with the departmental mandate .

Plan the world conference on Heavy Vehicle Weights and Dimensions to be hosted by Saskatchewan in June, 2000.

The international conference on Heavy Vehicle Weights and Dimensions is to be held in Saskatoon June 18-22, 2000. Between 80 and 100 technical papers will be presented at this symposium to approximately 175 delegates attending. Delegates are expected from Spain, Germany, United Kingdom, France, Sweden, Japan, Brazil, United States, Mexico and other countries.

Develop research and development plan for new vehicle technology to compliment the Transportation Partnership Program and improve transportation efficiency in Saskatchewan.

This has been delayed until 2000/2001 when a new staff member will be added to the branch.

Continue to support Economic Development in Saskatchewan by reducing the logistical costs of doing business by $2 million and by raising an awareness of more effective transportation and distribution alternatives.

The department worked with a number of companies, trade associations, other Departments and two educational institutions to support economic development by assisting in logistics savings of $1 million to $2 million. The primary focus was on increased awareness in transportation and distribution alternatives.

Resources

Financial

Logistics, Planning and Compliance accounted for four % of the total department expenditures in 1998/99 (Figure 14). This division had an approved budget of $8,267,000 and actual expenditures of $7,819,000 in 1998/99 (Figure 15).

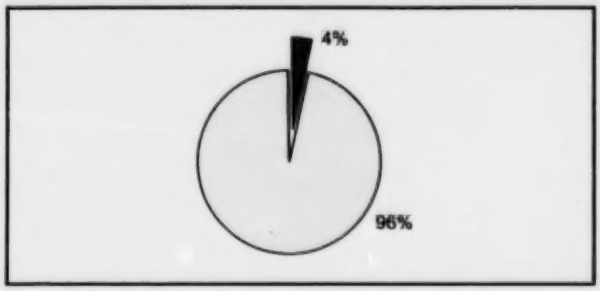


Figure 14. Actual 1998/99 expenditures as a per cent of total department expenditures.

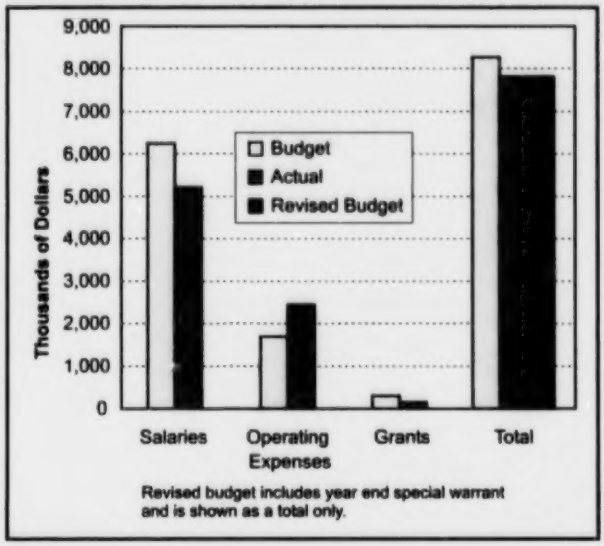


Figure 15. Actual 1998/99 expenditures - Logistics, Planning and Compliance.

People

A total of 118.6 FTEs were budgeted for Logistics Planning and Compliance for 1998/99. These positions are primarily located in head office in the Logistics, Planning and Compliance Division (Figure 16).

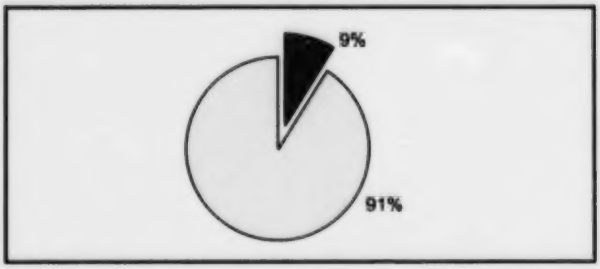


Figure 16. FTE's as a per cent of total department FTE's.

1999/00 Objectives

- Continue to ensure that Saskatchewan's interests are protected with changes to the grain handling and transportation system.
- Continue to ensure Saskatchewan's concerns are addressed during the Federal Grain Handling and Transportation Reform process.
- In preparation for the Sixth International Symposium on Heavy Vehicle Weights and Dimensions to be hosted in Saskatoon in June 2000, initiate the call for papers, solicit participation, organize schedules, and implement administrative procedures.
- Continue to monitor policy developments affecting the efficiency and competitiveness of the grain logistics system.
- Initiate a review of the trucking programs and policies.
- Implement the multi-jurisdictional National Roadside Survey 1999 to obtain comprehensive data on commodity origin, destination, volumes and equipment usage to facilitate transportation planning.
- Contribute to the development of the Provincial Climate Change Strategy led by Saskatchewan Energy and Mines.
- Cooperate with stakeholders to develop Saskatchewan positions on intergovernmental transportation and related issues.
- Develop bilateral relations with neighboring U.S. jurisdictions and facilitate the development of a model for ongoing improvements at second tier border crossings.
- Continue to monitor the federal government's air transportation initiatives to ensure Saskatchewan's interests are considered.
- Develop an aviation strategy for Saskatchewan through consultation.
- Develop a provincial strategy for deployment of Intelligent Transportation Systems, focussing on rural applications and commercial vehicle operations.
- Complete the formation of remaining area transportation planning committees by the end of fiscal year 2000-2001.
- Develop policies that will create stronger shared decision-making and responsibility partnerships with local governments through ATPCs and other opportunities.
- Establish a system to identify global trends and impacts on Saskatchewan transportation systems and services.
- Complete a draft policy for public consultation on major operational policies.
- Conduct inspections and investigations to detect and remove overweight and mechanically unfit vehicles and fatigued drivers from our roads.
- Increase compliance by carriers and drivers through information exchange, partnerships with key stakeholders, education and awareness programs.
- Reduce violations through deterrents such as legislative and/or regulatory change.

Program Delivery

This program provides for preventative maintenance, structural restoration, snow and ice removal, traffic guidance and land access management of provincial highways, bridges, airports, and ferries to ensure the safe, orderly and efficient movement of people and goods and the preservation of the Province's investment in transportation facilities. The Revolving fund is used to finance the procurement of equipment used in the preservation of the network as well as to provide public improvement custom work for municipalities, other government agencies and Crown corporations.

1998/1999 Objectives

To minimize the long term costs of preserving the highway system by developing, testing and implementing software tools to allow easier more consistent updating of the Asset management Models.

This is an ongoing objective supported by the budgeting and work scheduling systems. The budgeting system (Asset Management) continues to improve and evolve as more accurate performance prediction models are developed. The software tools needed of this activity were developed, implemented and used of the development of the 1999/00 program.

Complete conversion of all preservation manuals to the department Intranet to allow easy access to up to date standards and policies for all department staff while reducing printing costs.

This objective was met with all staff with Internet access having these manuals available to them at any time.

Complete construction of and implement a "world class" Maintenance Management System that will allow area managers and crew supervisors to do better crew scheduling and allocation.

A partnership with two other government transportation agencies and a private sector company was initiated and software design was started. The software was started in the other two jurisdictions. Due to resource limitations, start up in Saskatchewan was limited to a pilot project in one area. Full implementation is planned for 1999/00.

Complete development of a system to provide needs based budgets for all preservation activities.

This objective was deferred until full implementation of the Maintenance Management System.

Continue to work with the CICA and TAC to determine an appropriate valuation method and appropriate write down for highway assets.

This objective was met. The Department participated on a TAC special committee evaluating Performance Measures and Asset Valuation for transportation infrastructure. The final report of the committee in expected in 99-2000 and a "primer" on Asset Management for transportation agencies has been developed.

Resources

Financial

The department's maintenance expenditures accounted for 59 % of the total department expenditures in 1998/99 (Figure 17). The total approved budget was $135,000,000 which included a special warrant of $4,300,000 in 1998/99 to repair damage to Highway Nos.1, 11, 16 and other maintenance projects.

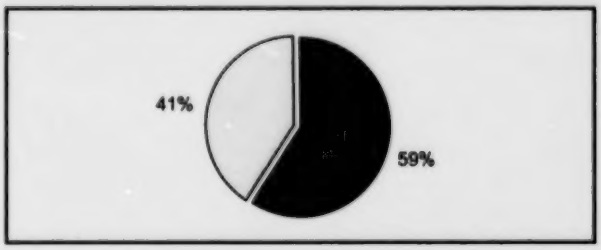


Figure 17. Actual 1998/99expenditures as a per cent of total department expenditures.

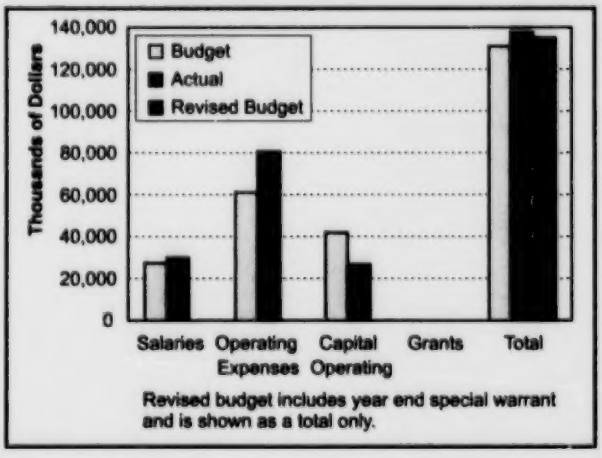


Figure 18. Actual 1998/99 expenditures - Maintenance of Transportation System.

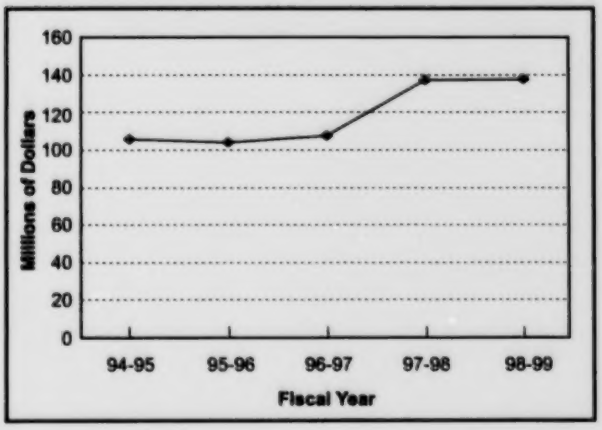


Figure 19. Historic maintenance expenditures - restated to include resurfacing.

People

Almost half of the total department's FTEs (776.3) support the various preservation and maintenance activities (Figure 20). This includes summer preventative maintenance activities and winter snow and ice control. These activities are largely carried out by department employees in work crews situated throughout the province.

An additional 174.5 FTE's in the Revolving Fund are devoted to maintaining and repairing the department's maintenance equipment fleet of trucks, graders, snowplows, etc.

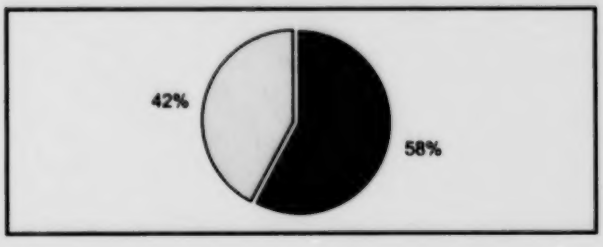


Figure 20. FTE's as a per cent of total department FTE's.

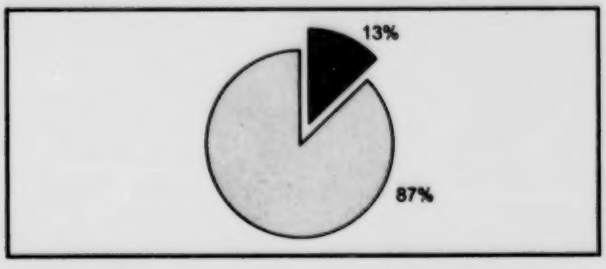


Figure 21. Revolving Fund FTE's as a per cent of total department FTE's.

Assets

The primary assets managed through the preservation and maintenance programs include several components of the provincial transportation system. This network includes 12 000 km of structural pavements, 8 600 km of thin pavements, 5 400 km of gravel roads, 850 bridges, 19 provincial airports, 12 cable ferries and one lake ferry. The full replacement cost of this transportation infrastructure is estimated at $6 billion.

The department's equipment fleet is managed through the Highways Revolving Fund, which obtains statutory funding through the maintenance program appropriation. The department's equipment fleet is currently made up of approximately 1,600 power units and 1,500 sundry units with an estimated value of $41 million.

1999/1900 Objectives

- To minimize the long-term costs of preserving the highway system.
- Develop and implement strategic objectives for the preservation program that will support the department's Vision and Values.
- Install state of the art communications and computing facilities in all the section shops. This will allow improved communications and decision making.
- Install and implement a "world class" Maintenance Management System that will allow area managers and crew supervisors to do better crew scheduling and resource allocation. The implementation will be based on the lessons learned in the pilot project last year.
- Complete development of a system to provide needs based budgets for all preservation activities.
- Continue to work with the CICA and TAC to determine an appropriate valuation method and appropriate write down for highway assets.

Program Services

To facilitate the operation of the province's highway network by applying and administering standards and policies on:

- roadside development;
- access management;
- roadside drainage;
- traffic guidance;
- traffic safety improvements;
- management of other undeveloped highway properties, including aggregate resources
- operational highway planning; and
- traffic counting.

Activities include:

- Issuance of permits for approaches, roadside developments adjacent highways, highway and municipal road crossings, utility corridors within public road right-of-ways, public activities on highways, work on highways by others, and gravel usage permits.
- Address all sub-division and community planning issues that may impact the provincial highway system.
- Assessment of highway drainage issues.
- Management of traffic guidance policies and standards related to private signing, pavement marking, highway signing, traffic signals, and speed limits.
- Administration of all speed limits on provincial highways.
- Administration of the provincial funding program for municipal airports.
- Management of the department's aggregate resources.
- Various technical engineering studies including accident investigations, traffic safety reviews, and area transportation corridor studies.
- Support area planning by assisting local municipalities with public highway planning (New in Nov. of 1998).
- Management of all traffic volume data on provincial highways available to the department.

1998/99 Objectives

Development of the Roadside Development Manual Volume 1.

This is a continuing initiative to consolidate existing operational policies dealing with roadside development, access management and the use of the provincial highway right-of-way by others into one reference document. This manual was completed in 1998/99 and will be tabled for approval in the 1999/2000 fiscal year.

Development of the Roadside Management Manual Volume 2.

This volume consolidates existing policies regarding private signing, and tourist related signing. This manual was completed in 1998/99 and will be tabled for approval in the 1999/2000 fiscal year.

Timely provision of permit services on an "on-demand" basis.

Category	Number
Approach	198
Miscellaneous	119
Pipeline Crossings	363
Roadside Development	132
SaskPower	115
Communication	164
Sask Energy	100
Seismic	245
Subdivisions	245
TLE	314
Total	**1,995**

Improve the department's aggregate management systems (pit log).

In addition to managing department owned aggregate sources, Operations Services keeps track of aggregate prospects on privately owned lands and other Crown lands. In 1998/99, year 2000 software problems were identified in the department's pitlog program and an action plan was developed to ensure that the software receives appropriate upgrading.

Develop new gravel search technologies.

Operations Services, in conjunction with Testing Services, continues to evaluate new and leading edge technologies for use in gravel exploration. These technologies include satellite imaging, ground penetrating radar, and new applications in the area of electromagnetic fields.

Review fee structures for aggregate usage permits.

This review was completed and the results were used to adjust the department's fee structure for sale of aggregate to more accurately reflect current aggregate market values.

Strategic Gravel Policy Project.

This is a multi-year project designed to address the issue of long term planning for gravel usage by the department and selected stakeholders (rural municipalities). This project was started in 1998/99 and is planned for completion by December 31, 1999.

Process flow-charting of the railway crossing improvement system.

This was deferred because resources were assigned to other higher priority projects.

Assets

The primary asset managed by Operations Services consists of the department's aggregate sources (gravel pits). The department's raw (uncrushed) aggregate sources are conservatively estimated to be in the order of 130 million cubic metres of gravel and 60 million cubic metres of unscreened sand.

The access management and roadside development policies administered by Operations Services extend the serviceable lifetime of the existing highway network and thus preserve its value and safety. This is accomplished by addressing situations that create unnecessary long-term traffic congestion and/or safety concerns.

1999/00 Objectives

- Develop a plan for and deliver support services to the Area Transportation Planning Councils.
- Improve the department's aggregate management system (pit log) software to ensure year 2000 compliance.
- Digitize pit plans for use with AutoCad and GIS systems, as well as conversion of pit plans to world co-ordinates for use with GPS systems.
- Develop a plan for reviewing and revising the Roadside Management Manuals Volumes 1 and 2, to improve policies dealing with roadside development and provincial highway access.
- Develop a policy on the issue of highways as airplane landing strips during emergencies.
- Address any recommendations that arise from the Strategic Gravel Policy Project.
- Undertake a review of the department's current and long term traffic data needs.
- Develop a policy regarding TransCanada Trail encroachments onto provincial highway rights-of-way.
- Identify the highest ranking collision black-spot locations on provincial highways, and rank all intersections with provincial highways by accident rate.
- Complete long term transportation planning studies for Saskatoon, Estevan, and the Regina South East bypass.
- Perform or manage at least six priority functional highway planning and/or area transportation studies at different highway locations throughout the province.

Program Delivery

This program provides for the upgrading or new construction of provincial highways, bridges and airports including planning, development of engineering standards, design and construction management. It also provides engineering services for major contracted preservation and maintenance activities and engineering advisory services to rural municipalities for designated rural roads.

1998/99 Objectives

The department is committed to providing a sustainable highway network. Efficient and affordable transportation is essential for the movement of agricultural products. We will provide planning and project management to deliver $22 million in capital upgrading of secondary rural agricultural highways impacted by changes in grain handling and value added-agriculture industries as a result of changes to the Western Grain Transportation Act.

The department provided planning and project management to deliver $23.8 million in capital upgrading of secondary rural agricultural highways impacted by changes in grain handling and value added agricultural industries as a result of changes to the *Western Grain Transportation Act* (WGTA).

The following projects were approved for upgrading in 1998/99 under the Canada Saskatchewan Canada Agri-Infrastructure Program (CAIP):

- Highway No. 8 from Wroxton to Jct. Highway No. 357;
- Highway No. 20 from 13 km north of Humbolt to Pilger;
- High vay No. 35 from Tribune to Colgate;
- Highway No. 334 from Corrine to 8 km east of Avonlea;

Aggregate processing for the Highway No. 20 and Highway No. 334 projects was carried out in the winter of 1997/98. These projects were substantially completed in 1998/99 with the exception of the Highway No. 20 project, which will be completed in 1999/00.

The department is committed to strengthening thin membrane surface (TMS) provincial highways, which are being damaged by increasing grain and value added processing haul and changing agricultural haul patterns. During 1998/99 approximately 220 km of secondary rural agricultural highways were upgraded at a cost of $23.8 million. This work included:

- Highway No. 4, 21 km between Cando and Red Pheasant; $2,260,000
- Highway No. 8, 13.5 km from Fairlight to 13 km north; $1,030,000
- Highway No. 8, 20 km from Wroxton to Jct. No. 357 (CAIP), $2,160,000
- Highway No.20, 21 km from north of Humboldt to Pilger (CAIP); $1,820,000
- Highway No. 21, 19 km from Unity to Grid 787; $4,020,000
- Highway No. 35, 12 km from Tribune to Colgate (CAIP); $2,010,000
- Highway No. 45, 18 km from Lucky Lake to Birsay, $150,000
- Highway No. 48, 5 km from Jct. No. 8 to west of Fairlight; $540,000
- Highway No. 303, 34 km from Jct. No. 21 to east of Lloydminster, $1,170,000
- Highway No. 304, 16 km from West of Jct. No. 4 to Makwa, $1,810,000
- Highway No. 334, 26 km from Corrine to 8 km east of Avonlea (CAIP); $3,780,000
- Highway No. 368, 15 km from Jct. No. 5 to Grid No. 756; $3,090,000

The department completed the necessary programming support and winter works to enable delivery of the 1999/00 CAIP program.

We are committed to complete twinning of the Trans Canada Highway from border to border and the Yellowhead Highway from North Battleford to the Alberta border by 2012. The completion of twinning these highways will contribute to economic growth and diversification and provide enhanced safety for the motoring public. In 1998/99 twinning projects will include:

The provincial government announced this long term twinning commitment in the spring of 1997. During 1998/99, the department started construction of this initiative. At a cost of $4 million the subgrade was constructed on a 27.5 km section of the Trans-Canada Highway from west of Gull Lake to west of Tompkins. A $630,000 aggregate stockpiling contract was tendered in the winter of 1998/99 to make aggregate available for paving this section of Highway No.1 in 1999/00.

A 21 km grading contract on Highway No.1 from east of Indian Head to west of Wolsely was tendered in the late summer. With an extended construction season and mild winter, the contractor was able to make more progress on this project than anticipated. This project will likely be completed in 1999/00.

While there was no construction activity on Highway No.16, the department completed the grading design and purchased a portion of the right of way property for the project between Marshall and Lashburn that will be started in 1999/00.

A functional planning study was started for Highway No.1 between Indian Head and the Manitoba border.

To improve safety and service, the design and construction of an interchange at Pasqua & Highway No.11 is to commence in 1998/99. Minor work for traffic accommodation during construction, if required, will be carried out in 1998/99. The safety of the motoring public using this intersection will vastly improve upon completion of the interchange, planned for 2000/01.

In 1998/99 the department purchased property for the interchange right of way and completed the interchange design. Grading and the bridge construction will start in 1999/00. The interchange will be completed by the fall of 2000 at an estimated cost of $7 million.

In support of an acceptable level of service and safety on high volume highways, the 14 km twinned section of Highway No. 12 between Saskatoon and Martensville will be paved in 1998/99. The four-lane highway and ancillary facilities are scheduled for completion in 1999/2000.

The twinned highway between Saskatoon and Martensville was opened to traffic in September 1998. The work in 1998 included completing a 14 km paving contract at a cost of $5.8 million. The overpass at the junction of Highway No. 12 and Highway No. 11 was widened at a cost of $480,000. Interchange lighting and minor works will be finished in 1999/00.

In addition, the department completed the grading design and purchased right of way property for a four-laning project from Saskatoon to 8 km east. The roadwork will commence in 1999/2000 with an expected completion in 2000/2001.

The province is continuing to support the social and economic development of Outlook and area and all Highway No. 15 traffic users. The new Highway No. 15 Outlook Bridge will be completed and opened to the public in late 1998. This $10 million project will provide an important river crossing for oversize vehicles and provide an improved level of service and safety. The new bridge provides an important link for inter-regional and interprovincial movement of goods and services.

The new Outlook Bridge opened in 1998. The bridge deck was constructed and the associated roads were paved at a cost of $3.7 million. The project was completed on schedule over two years at a total cost of $11 million.

We will enhance safety on the provincial highway network with the construction of additional traffic lanes to accommodate traffic flow turning movements at three high volume intersections.

An acceleration lane was constructed at the Husky Oil Access on Highway 16 near Lloydminster. The department constructed a service road between the Saltcoats Regional Park and Saltcoats, which separated low speed park traffic travelling to Saltcoats from traffic on the Yellowhead Highway.

Turning lanes, which provide enhanced safety for high volumes of through and turning traffic, were constructed at the following intersections:

- Highway No. 8, Chief Gabriel's School north of Kamsack.
- Highway No. 15, UGG Grain Terminal at Melville
- Highway No. 17, Intersection Highway No. 17 and 69th St. in Lloydminster

In support of transportation services to the Athabasca basin area, delivery of the two year, $8.6 million, 180 km seasonal road from the existing roads end on Highway No. 905 to Black Lake is scheduled for completion in 1998/99. This project includes the construction of one major bridge across the Cree River and four smaller bridges.

The cost of this project has increased from $8.6 million to $14 million and has carried over to 1999-00 for completion. In 1998-99 bridges were constructed across the Cree River, Hawkrock River and Mitchell Creek. The department constructed 70 km of seasonal road. Although the project will not be completed until 1999-00, a winter access from the completed portion of the road across Black Lake to the community of Black Lake was opened to traffic on February 18, 1999 for interim resupply purposes.

In order to support economic development opportunities for local residents, the department has created provisions in the contract documents to ensure that the contractors maximize the employment and business opportunities for local residents.

The cost of this project increased because of an unusually mild winter with higher than normal snow fall that seriously affected planned winter work, increased environmental requirements and unanticipated terrain conditions that increased excavation and haul quantities. Projects of this nature, which are exposed to extremities of weather conditions, unknown and unpredictable terrain conditions and are located in remote and sensitive environmental areas, carry a risk for increased costs during project delivery.

In support of northern community access, a three year, 30 km, $3.6 million project on Turnor Lake Access Highway No. 909 was started in 1997/98. Work will continue in 1998/99 with grading of 15 km.

At a cost of $1.1 million, 15 km of grading was completed. The remaining 15 km will be completed over the next few years. The department has created provisions in the tender

documents to ensure that the contractors maximize the employment and business opportunities for local residents.

We will support the forestry industry and access to northern communities by upgrading northern road links that serve this multi-functional need. Regrading on Highway No. 165 will continue in 1998/99 with plans to complete 42 km. Regrading will be continued on 21 km of Highway No. 903. Upgrading of 16.5 km on Highway No. 965 is scheduled for 1998/99 with completion of the project in 1999/00.

The department invested $7.5 million to reconstruct 41 km of Highway No. 165 from 14.9 km North of Jct. Highway No. 2 to the Jct. Highway No. 910. Reconstruction of 17 km of Highway No. 903 from Muskoseu Creek to Broad Creek was completed at a total cost of $2.3 million. Work continued on Highway No. 965 where 13 km was reconstructed between 10 km and 23 km east of Jct. Highway No. 903 at a cost of $1.7 million. Community access roads to Jans Bay and Canoe Narrows were rebuilt as part of this project.

Once again on this northern work, the department has created provisions in the tender documents to ensure that the contractors maximize the employment and business opportunities for local residents.

In support of regional planning initiatives, we will work with the department's regional offices and local levels of government to carry out planning studies in Saskatoon and Estevan and their surrounding areas.

The department partnered with the city of Estevan to conduct a regional highway planning study in Estevan. A consultant was hired to evaluate the movement of highway traffic through Estevan. Recommendations are expected in December 1999.

The department partnered with the city of Saskatoon and the rural municipality of Corman Park to conduct a regional highway planning study in Saskatoon and its surrounding vicinity. A consultant was hired to undertake the study and recommendations are expected in early 2000.

In addition, the department initiated and completed a planning study in Swift Current. The department also started a planning study in and around Rosetown.

In support of improved access for local, regional and inter-regional movement of goods and services, we will undertake an assessment of rehabilitation options for the St. Louis Bridge including geotechnical analysis for potential future construction of a new bridge.

The department assessed rehabilitation options and determined that a new bridge was the most feasible option. Phase IV of the geotechnical site investigation which provided three potentially suitable corridors for bridge construction from a geotechnical point of view was completed. A consultant was commissioned to complete a functional planning study assessing the various roadway and bridge alternates for these three corridors. The study included consultations with local municipal governments and a public meeting. The results of the functional planning study are expected in early 2000.

To enhance north south links between Saskatchewan and the United States we will carry out improvements at the North Portal crossing. The department will also conduct engineering design and survey on the section of Highway No. 6 north of the United States border to Ceylon.

The department worked with North Dakota to make improvements to the roadways at the North Portal border crossing at a cost of $310,000. In conjunction with improvements being made to the Port of Entry facilities, the department widened Highway No. 8 to improve traffic flow at the US border crossing south of Carievale. The department also completed the design and survey for the paving of Highway No. 6 from North of Minton to South of Ceylon.

To provide appropriate engineering standards and business practices and to improve efficiency and economy of pavement designs and preservation treatments, we will publish an updated surfacing manual.

The surfacing manual has been drafted and is being used by department staff. The manual will be published in 1999/00.

In support of efficient record management, we will develop a new filing manual, consistent with the Saskatchewan Administrative Records System (SARS).

In response to other higher priority projects, this initiative was placed on hold until resources could be made available to continue the project.

In response to a project request from Regional Operations Engineers, we will undertake the drafting of a new Roadside Management Manual that will assist staff to effectively and efficiently protect and manage our highway infrastructure.

People from many parts of the department came together to develop a new Roadside Management Manual, Volumes 1 and 2.

We will continue to work with other provincial, territorial and national transportation agencies in support of the new TAC Manual of Geometric Design Guidelines for Canadian Roads, to be published in 1998.

The new TAC Geometric Design Guide for Canadian Roads will be published in September 1999 and will incorporate new information from Canadian agencies, American Association of State Highway and Transportation Officials (AASHTO) and other sources.

The department served on the extended project steering committee and the review committee. Over the next two years we intend to adopt the new TAC Geometric Design Guide as the principal design manual for the department, with inclusion of a Saskatchewan supplement highlighting our local design policies.

We will continue to enhance project management on individual construction projects to achieve a 10 % variance between prior award estimates and final actual costs.

On completed capital construction projects, the department met the objective on seven out of 22 projects (32 %). On four of those projects, significant cost increases were the result of unforeseen environmental concerns and the additional work required to mitigate these concerns.

We will provide the project management and delivery of northern airport projects funded through the federal Government's Airport Capital Assistance Program (ACAP). These projects support the provision of air services, including emergency air medical services, to remote northern communities.

Under the federal government's Airport Capital Assistance Program (ACAP), loaders were purchased for the Fond-du-Lac, Stony Rapids and Uranium City airports at a total cost of $955,000. Design work was carried out for airport improvements at Fond du Lac, La Ronge and Wollaston.

Resources

Financial

The department's revised capital budget for 1998/99 was $75,430,000 with actual expenditures of $75,417,000. The breakdown of the capital budget for construction of the transportation system is shown in Figure 22.

The historical trend in capital expenditures is shown in Figure 23.

Capital expenditures, which include funding for new capital construction and major upgrading of highways, bridges and provincial airport infrastructure, represent approximately 33 % of the total department budget, as shown in Figure 24.

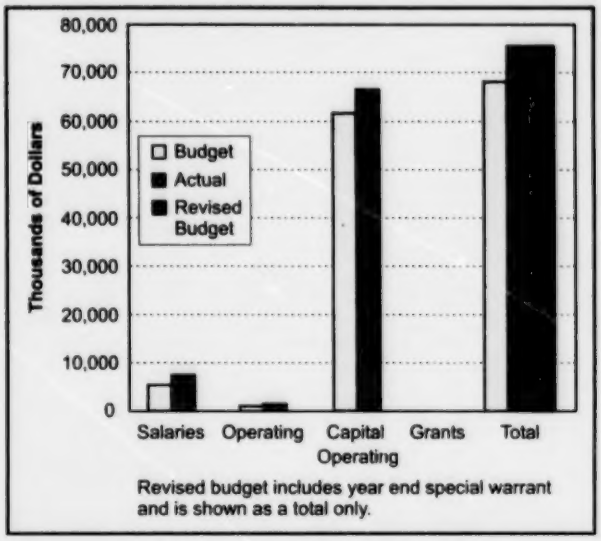


Figure 22. Actual 1998/99 expenditures - Construction of Transportation System.

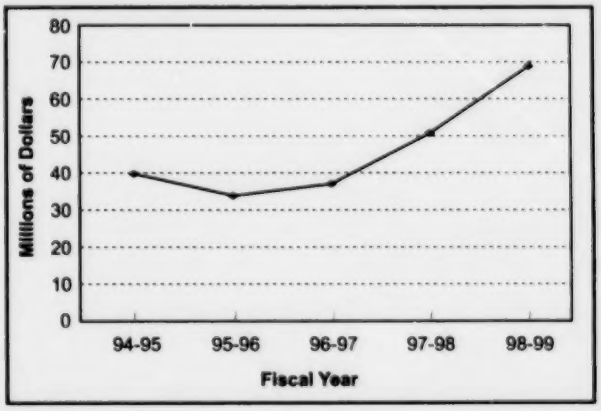


Figure 23. Historic capital expenditures - restated to exclude resurfacing.

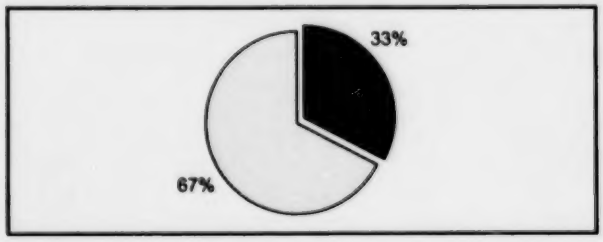


Figure 24. Actual 1998/99 capital expenditures as a per cent of total department expenditures.

People

The delivery of the department's construction work is primarily contracted to private road builders. The majority of the 188.6 FTEs related to the construction budget are involved in work related to contract supervision. These positions represent 14 % of the total department's FTEs, as shown in Figure 25.

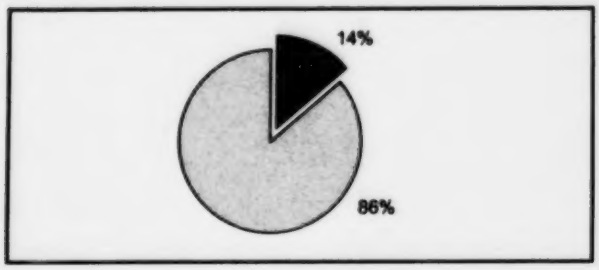


Figure 25. FTE's as a per cent of total department FTE's.

The division's 1996 reorganization continued to have minor impacts on employees. Two letters of understanding, related to new position duties, were developed in consultation with the Saskatchewan Government Employees Union.

Assets

The main assets of ESD are computers, survey equipment, engineering software and laboratory and field testing equipment typical of an engineering office.

1999/00 Objectives

- The department is committed to providing a sustainable highway network. Efficient and affordable transportation is essential for the movement of agricultural products. We will provide planning and project management to deliver $20.5 million in capital upgrading of secondary rural agricultural highways impacted by changes in grain handling and value added-agriculture industries as a result of changes to the *Western Grain Transportation Act.*
- We are committed to complete twinning of the Trans Canada Highway from border to border and the Yellowhead Highway from North Battleford to the Alberta border by 2012. Twinning these highways will contribute to economic growth and diversification and provide improved safety for the motoring public.
- Construction of an interchange at Pasqua & Highway No. 11 will commence in 1999/00. The safety of the motoring public using this intersection will improve upon completion of the interchange, planned for 2000/01.
- To improve service and safety on high volume highways, the department will start a grading contract to twin Highway No. 16 from Saskatoon to 7 km east. The four-lane highway and ancillary facilities are scheduled for completion in 2000/01. The department will commission a consultant to develop a detailed design and tender documents for a second river crossing in North Battleford.
- We will enhance safety on the provincial highway network by partnering with industry and other stakeholders on the construction of additional traffic lanes that accommodate traffic flow turning movements at five high volume intersections. In partnership with Saskatchewan Environment and Resource Management, we will separate cars from bicycles and pedestrians by constructing a pedestrian bicycle pathway at Good Spirit Lake. Delineation lighting will be installed at 11 locations across the province.
- The department consulted with Saskatchewan Environment and Resource Management (SERM) on tourism priorities and will undertake improvements to Greenwater Lake Provincial Park roads that will support the provincial tourism industry.
- The department will complete and open the Athabasca Seasonal Road. This road will allow supplies to be delivered to residents of the Athabasca Basin once the barge service is discontinued.
- In support of northern community access, a three-year, 30 km, $3.6 million project on Highway 909, Turnor Lake Access, was initiated in 1997/98. Work will continue in 1999/00 with the grading of an another 5 km of this highway.
- We will support the forestry industry and access to northern communities by upgrading northern road links that serve this multi-functional need. Subject to receiving environmental approval, the department will regrade Highway No. 951 from the Jct. Highway No. 903 to Waterhen Lake and Highway No. 941 from Waterhen Lake to the Jct. Highway No. 904. Reconstruction of Highway No. 965 will continue with the grading of 11 km between 10 and 21 km west of Jct. Highway No. 165. Reconstruction will continue on Highway No. 903 with the grading of 16 km from Broad Creek to 7 km North of Jct. Highway No. 904. The department will also grade 10 km of Highway No. 943.
- To support economic and social development in northern Saskatchewan, the department will continue to make provisions in contract documents to allow employment and business opportunities for northern residents on construction projects in northern Saskatchewan.

- We will work with the department's regional offices and local levels of government to complete the planning studies in Saskatoon, Estevan, Rosetown and their surrounding areas. We will initiate a similar planning study in and around Lloydminster.
- We will complete the functional planning study and continue the geotechnical site investigation for the location of a new St. Louis bridge and its associated roadways.
- To enhance north south links between Saskatchewan and the United States we will surface 13 km of Highway No. 6 from North of Minton to South of Ceylon.
- To provide appropriate engineering standards and business practices and to improve efficiency and economy of pavement designs and preservation treatments, we will publish the updated surfacing manual.
- We will introduce higher quality asphalt concrete specifications for projects tendered on the National Highway System.
- The department will start a process to amalgamate the new Geometric Road Design Guide introduced by the Transportation Association of Canada with the Department's Design Manual Part I. This will help staff keep abreast of new research and technology in road design, minimize department resources to update the road design standards and promote consistency in road design standards between provincial jurisdictions.
- To improve design procedures, the department will implement new hydraulic design software to replace existing software that is not current with recent developments in hydraulic design.
- As a business process improvement, the department will use Global Positioning System (GPS) survey techniques in gravel location in order to improve the efficiency of collecting and reporting gravel pit information.
- To reduce environmental contaminants and improve worker safety, the department will eliminate the use of highly toxic chemicals used for determining asphalt content from our mobile testing labs by implementing asphalt content ignition ovens.
- To establish innovative ways of reducing overall construction and property costs, the department will introduce a formal Value Engineering (VE) process at the preliminary design stages, while keeping all critical elements of highway design and safety. We will develop an explicit safety review process during the detailed geometric design to reduce the number of post construction safety improvements.
- We will improve project management on individual construction projects to achieve a 10 % variance between prior award estimates and final actual costs. To improve estimating precision, the department will create an internal web site in which current bid price trends will be accessible.
- To comply with changes in Occupational Health and Safety regulations, the department will develop a process to safety certify large contractors. A system will be developed to certify other contractors and consultants are working for the department.
- We will undertake a review of the current tendering processes with the Saskatchewan Roadbuilders Association.

Key Interest Groups

The department supports the research findings of the Conference Board of Canada which recommends that public sector organizations distinguish between direct and indirect customers or external stakeholders.

Direct Customers are direct recipients of the service being delivered. For the department, these can be segmented as:

- general users
- major industry groups (including agriculture, forestry, mining, oil)
- transportation sector
- municipal governments

Indirect Customers have a stake in the products and services provided by public sector organizations although they are not direct recipients. Their needs are addressed by the mission or purpose of the public sector organization and for the department this group includes:

- citizens or taxpayers
- future beneficiaries
- interest groups
- internal customers
  - government leaders, Cabinet
  - other provincial government departments

Contact

For more financial information on Saskatchewan Highways and Transportation, please contact - Corporate Information Services Division, (306) 787-4794, Regina.

Locations

Head Office - 1855 Victoria Ave., Regina

Engineering Services Division - 1630 Park St., Regina
- 350 3rd Ave. N., Saskatoon

Testing Services - 1610 Park St., Regina

Southern Region - 1855 Victoria Ave., Regina

Central Region - 2174 Airport Dr., Saskatoon

Northern Region - 1288 Central Ave., Prince Albert

Glossary

AASHTO - American Association of State Highway and Transportation Officials

ACAP - Airport Capital Assistance Progam

AGEN - Aboriginal Government Employees Network

ATPC - Area Transportation Planning Committee

CCMTA - Canadian Council of Motor Transport Administrators

CICA - Canadian Institute of Chartered Accountants

CVSA - Canadian Vehicle Standards Association

ERD - Equipment Repair Depot

ESB - Equipment Storage Building

ESD - Engineering Services Division

FSIN - Federation of Saskatchewan Indian Nations

FTEs - Full Time Equivalents

GIS - Geographic Information System

GPS - Global Positioning System

HIFI 2000 - High[illegible]s Oracle Financial System

IPS - Intranet Personnel System

IRD - International Road Dynamics

ITIL - Information Technology Infrastructure Library

LAN - Local Area Network

Logistics - the overall system of transportation and storage involved in business

MMS - Maintenance Management System

NIP - National Infrastructure Program

PSIS - Property Services Information System

PSC - Public Service Commission

RMSP - Rural Municipal Sharing Program

SARM - Saskatchewan Association of Rural Municipalities

SARS - Saskatchewan Administrative Records System

SGEU - Saskatchewan Government Employees Union

SHIP - Strategic Highway Improvement Program

SPMC - Saskatchewan Property Management Corporation

SUMA - Saskatchewan Urban Municipalities Association

TAC - Transportation Association of Canada

TMS - Thin membrane surface

UGG - United Grain Growers

WAN - Wide Area Networks